

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: D. Brian Ballard

GENERAL INFORMATION:

Name: Toyota Motor Manufacturing Kentucky, Incorporated
Address: 1001 Cherry Blossom Way, Georgetown, KY 40324
Date application received: July 11, 2005
SIC/Source description: 3711/Automobile Assembly
EIS #: 21-209-00030
Source A.I. #: 7998
Activity #: APE20050005
Permit number: V-04-027 (Revision 2)

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
<input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input checked="" type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)	

MISCELLANEOUS:

☐ Acid rain source
☐ Source subject to 112(r)
☐ Source applied for federally enforceable emissions cap
☐ Source provided terms for alternative operating scenarios
☒ Source subject to a MACT standard
☐ Source requested case-by-case 112(g) or (j) determination
☐ Application proposes new control technology
☒ Certified by responsible official
☒ Diagrams or drawings included
☐ Confidential business information (CBI) submitted in application
☐ Pollution Prevention Measures
☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

TABLE 1- Actual and Potential Source-wide Criteria Pollutant Emissions

POLLUTANTS	ACTUAL (TPY)	V-04-027 (REVISION 1) PTE (TPY)	V-04-027 (REVISION 2) PTE (TPY)
CO (CARBON MONOXIDE)	26	448	607
NO ₂ (NITROGEN DIOXIDE)	30	518	708
PM ₁₀ (PARTICULATE MATTER < 10 MICRONS)	160	385	311
PT (PARTICULATE MATTER)	160	385	311
SO ₂ (SULFUR DIOXIDE)	0.25	5.2	6.3
VOC (VOLATILE ORGANIC COMPOUNDS)	1,704	6,277	5,905

Comments:

The overall increase in potential emissions of CO, NO₂ and SO₂ are due primarily to the inclusion of indirect heat exchangers, direct heat exchangers and process heaters in various plant buildings that were previously not accounted for in V-04-027 (Revision 1) or V-04-027. These combustion sources were not included in the 2004 Title V application. Updated lists of all indirect heat exchangers, direct heat exchangers and process heaters for each plant building were submitted on November 29, 2006. The potential to emit totals for V-04-027 (Revision 2) are based on the updated lists.

The overall decrease in potential emissions of VOC can primarily be attributed to efficiency increases in the Paint and Plastics shops. In some instances, the use of water-borne paints instead of solvent-borne paints may contribute to the emissions decrease. The overall decrease in potential PM/PM₁₀ emissions is primarily due to the development of more accurate emission factors based on recent stack test data.

EMISSIONS SUMMARY (CONTINUED):

TABLE 2- Actual and Potential Source-wide HAP Emissions

POLLUTANT	CAS No.	ACTUAL (TPY)	POTENTIAL (TPY)
Benzene	71-43-2	0.9	1.2
Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	8.6	10.4
Chlorobenzene	108-90-7	3.6	3.9
Cumene	98-82-8	27.3	34.5
Ethyl benzene	100-41-4	310	368
Ethylene glycol	107-21-1	127	149
Formaldehyde	50-00-0	42.3	48.8
Hexane*	110-54-3	17.4	31.4
Methanol	67-56-1	281	353
Methyl chloroform (1,1,1-trichloroethane)	71-55-6	0.22	0.27
Methyl isobutyl ketone	108-10-1	294	390
Methylene diphenyl diisocyanate (MDI)	101-68-8	1.57	1.71
Naphthalene	91-20-3	109	118
Phthalic anhydride	85-44-9	5.25	6.16
Styrene	100-42-5	72.6	79.0
Toluene	108-88-3	629	755
Triethylamine	121-44-8	15.6	15.8
Xylenes (isomers and mixture)	1330-20-7	1134	1362

The potential to emit values for Hazardous Air Pollutant (HAP) emissions listed above are based on the air toxics modeling report included with the 2004 Title V permit application. The potential to emit values listed above consider VOC emission limits where applicable. *Hexane emissions are not based on the aforementioned data. Potential hexane emissions have been updated to reflect the hexane emitted from natural gas combustion.

EMISSION AND OPERATING CAPS:

No Changes

OPERATIONAL FLEXIBILITY: N/A

SOURCE PROCESS DESCRIPTION:

See Statement Of Basis